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WHAT IS CLAIMED IS:

1. A method of utilizing discrete devices in a wellbore wherein a working fluid provides fluid flow path for moving said discrete devices from a first location of introduction of said devices into the flow path to a second location of interest, said method comprising:

- selecting at least one flowable discrete device constituting a data carrier that is adapted to be moved in the wellbore at least in part by the working fluid ("flowable device");
- introducing the at least one flowable discrete device into the fluid flow path at the first location to cause the working fluid to move the at least one flowable device to the second location of interest; and
- providing a data exchange device in the fluid flow path for effecting data exchange with the at least one flowable discrete device.

2. The method of claim 1, wherein selecting the at least one flowable device comprises selecting the at least one flowable device from a group consisting of: (i) a device having a sensor for providing a measure of a parameter of interest; (ii) a device having a memory for storing data therein; (iii) a device carrying energy that is transmittable to another device; (iv) a solid mass carrying a chemical that alters a state when said solid mass encounters a particular property in the wellbore; (v) a

device carrying a biological mass; (vi) a data recording device; (vii) a device that is adapted to take a mechanical action, and (viii) a self-charging device due to interaction with the working fluid in the wellbore.

3. The method of claim 1, wherein said selecting the at least one flowable device comprises selecting a device that provides a measure of a parameter of interest selected from a group consisting of: (i) pressure; (ii) temperature; (iii) flow rate; (iv) vibration; (v) presence of a particular chemical in the wellbore; (vi) viscosity; (vii) water saturation; (viii) composition of a material; (ix) corrosion; (x) velocity; (xi) a physical dimension; and (xi) deposition of a particular matter in a fluid.

4. The method of claim 1, wherein selecting at least one flowable device comprises selecting a device that comprises:

- a sensor for providing a measurement representative of a parameter of interest;
- a memory for storing data relating at least in part to the parameter of interest;
- a source of power for supplying power to a component of said flowable device; and
- a controller for determining data to be carried by said memory.

5. The method according to claim 4 further comprising providing a transmitter for the at least one flowable device for effecting data exchange with the flowable device.

6. The method of claim 5, wherein effecting the data exchange comprises communicating with said at least one flowable device by a method selected from a group consisting of: (i) electromagnetic radiation; (ii) optical signals; and (iii) acoustic signals.

7. The method of claim 1, wherein selecting the at least one flowable device comprises selecting a flowable device that is adapted to carry data that is one of (i) prerecorded on the at least one flowable device; (ii) recorded on the at least one flowable device downhole; (iii) self recorded by the at least one flowable device; (iv) inferred by a change of a state associated with the at least one flowable device.

8. The method of claim 1, wherein selecting the at least one flowable comprises selecting a device from a group of devices consisting of: (i) a device that is freely movable by the working fluid; (ii) a device that has variable buoyancy; (iii) a device that includes a propulsion mechanism that aids the at least one flowable device to

flow within the working fluid; (iv) a device that is movable within by a superimposed field; and (v) a device whose movement in the working fluid is aided by the gravitational field.

9. The method of claim 1, wherein selecting the at least one flowable device comprises selecting a device that is one of: (i) resistant to wellbore temperatures; (ii) resistant to chemicals; (iii) resistant to pressures in wellbores; (iv) vibration resistant; (v) impact resistant; (vi) resistant to electromagnetic radiation; (vii) resistant to electrical noise; and (viii) resistant to nuclear fields.

10. The method of claim 1, wherein said introducing the at least one flowable device into the working fluid further comprises delivering the at least one flowable device to the working fluid by one of (i) an isolated flow path; (ii) a chemical injection line; (iii) a tubing in a wellbore; (iv) a hydraulic line reaching the second location of interest and returning to the surface; (v) through a drill string carrying drilling fluid; (vi) through an annulus between a drill string and the wellbore; (vii) through a tubing disposed outside a drill string; and (viii) in a container that is adapted to release said at least one flowable device in the wellbore.

11. The method of claim 1 further comprising recovering said at least one flowable device.

12. The method of claim 14, wherein recovering the at least one flowable device comprises recovering the at least one flowable device by one of (i) fluid to solid separation; and (ii) fluid to fluid separation.

13. The method of claim 1, wherein said introducing the at least one flowable device includes introducing a plurality of flowable devices each such flowable device adapted to perform at least one task.

14. The method of claim 13, wherein said introducing a plurality of flowable devices comprises one of (i) timed release; (ii) time independent release; (iii) on demand release; and (iv) event initiated release.

15. The method of claim 1, wherein introducing said at least one flowable device comprises delivering a plurality of flowable devices into fluid circulating in a wellbore to cause at least a number of the flowable devices to remain in the wellbore at any given time, thereby forming a network of the flowable devices in the wellbore.

16. The method of claim 15, wherein the flowable devices in said plurality of devices are adapted to communicate information with other devices, thereby forming communication network in the wellbore.

17. The method of claim 1 further comprising providing a unique address to the at least one flowable device.

18. The method of claim 1 further comprising providing a data communication device in the wellbore for communicating with the at least one flowable device.

19. The method of claim 18 further comprising causing the data communication to exchange data with the at least one flowable device and to transmit a signal confirming said data exchange.

20. The method of claim 1, wherein said selecting said at least one flowable device comprises selecting the at least one flowable device that includes a sensor that is one of (i) mechanical (ii) electrical; (iii) chemical; (iv) nuclear; and (v) biological.

21. The method of claim 1 further comprising implanting a plurality of spaced apart flowable devices in said wellbore during drilling of said wellbore.

22. The method of claim 7 further comprising receiving the data carried by said at least one flowable device by a downhole device and transmitting a signal in response to said received signal to a device located outside said wellbore.

23. The method according to claim 22 further comprising said device outside said wellbore at a location that is one of: (i) in a lateral wellbore associated with said wellbore; (ii) a separate wellbore; (iii) at the surface; and (iv) in an injection well.

24. A wellbore system utilizing at least one flowable device constituting a data carrier that is adapted to be moved by a fluid flowing in the wellbore comprising:

(a) a forward fluid flow path associated with the wellbore for moving the at least one flowable device from a first location of introduction of the at least one flowable device into the forward fluid path to a second location of interest;

(b) a data exchange device at the second location of interest for effecting data exchange with the at least one flowable device that is one of (i) retrieving information carried by the at least one flowable device; or (ii) inducing selected information on the at least one flowable device.

25. The wellbore system of claim 24 further comprising a return fluid flow path for moving the at least one flowable device from the second location of interest to a return destination.

26. The wellbore system of claim 24, wherein the first location of introduction and the return destination are at the surface.

27. The wellbore system of claim 25, wherein the forward flow path is through a drill string utilized for drilling the wellbore and the return fluid flow path is an annulus between the drill string and the wellbore.

28. The wellbore system of claim 25, wherein (i) the forward fluid flow path comprises a first section of a u-tube extending from the first location to the second location of interest and (ii) the return path comprises a second section of the u-tube returning to the return destination.

29. The wellbore system of claim 24, wherein the second location of interest is in the wellbore and the data exchange device is located proximate said second location of interest.

30. The wellbore system of claim 24 further comprising a controller for performing an operation that is one of (i) retrieving information from the at least one flowable device from the data exchange device, or (ii) causing the data exchange devices to induce a particular information onto the at least one flowable device.

31. The wellbore system of claim 25 further comprising a control unit for processing data contained in the flowable device returning to the destination.

32. Th wellbore system of claim 30, wherein the controller performs at least one operation in response to the data retrieval from the at least one flowable device.

33. A system for implanting at least one flowable device in the wall of the wellbore during drilling of the wellbore, comprising:

- a drill string having a drill bit at end thereof for drilling the wellbore;
- a source of drilling fluid for supplying the drilling fluid to the drill string;
- a source for introducing at least one flowable device into the drilling fluid; and
- an implanting device carried by the drill string uphole of the drill bit, said implanting device receiving the at least one flowable device from the drilling fluid and implanting the at least one flowable device in the wall of the wellbore.

34. A method of utilizing flowable devices in a wellbore carrying a fluid from a downhole location to the surface, each flowable device constituting a data carrier and adapted to be moved by the fluid, said method comprising:

- locating a plurality of flowable devices at a selected location in a wellbore; and
- selectively releasing the flowable devices into fluid, thereby moving the flowable devices carry data from the selected location in the wellbore to the surface.

35. The method of claim 34, wherein the locating of a plurality of the flowable devices includes locating said devices in a magazine from where said devices are individually releaseable into the flow of the fluid.

36. The method of claim 34 further comprising providing a controller in the wellbore for inducing information n to the at flowable devices prior to their release into the fluid.

37. The method of claim 34, wherein the releasing the flowable devices includes at least one of (i) releasing the flowable devices at predetermined time intervals, (ii) releasing a flowable device upon the occurance of a particular event; or (iii) releasing the flowable devices periodically.

38. A discrete flowable device adapted to be moved at least partially by a fluid flowing in a wellbore, comprising:

- a sensor for taking measurements relating to a wellbore parameter;
- a controller for processing the sensor measurements;
- a memory for storing data;
- a power source for supplying power to elements of the flowable device;
- an antenna for communicating information to a device external to the flowable device; and

a body housing the sensor, controller, memory and the power source, which body is adapted to protect the device from wellbore conditions.

39. The discrete flowable device according to claim 38 further comprising an external member that interacts with fluid in the wellbore to aid in generating electrical energy.

40. The discrete flowable device according to claim 39, wherein the electrical energy is utilized to charge the power supply.

41. The discrete flowable device according to claim 38 further comprising a buoyancy device to alter the buoyancy of the discrete flowable device.

42. The discrete flowable device according to claim 38 further comprising a propeller for aiding the discrete flowable device to flow in the wellbore.